

- 1) Find the equation the line that goes through the points (42,15) and (40,25).

$$y - y_1 = m(x - x_1)$$

$$y - 15 = -5(x - 42)$$

$$y - 15 = -5x + 210$$

$$y = -5x + 225$$

$$m = \frac{25-15}{40-42} = \frac{10}{-2} = -5$$

- 2) Find the equation of the line that goes through the points (11,3) and (18,11).

$$m = \frac{11-3}{18-11} = \frac{8}{7}$$

$$y - 3 = \frac{8}{7}(x - 11)$$

$$y - 3 = \frac{8}{7}x - \frac{88}{7}$$

$$y = \frac{8}{7}x - \frac{67}{7}$$

$$\frac{3}{1} = \frac{21}{7}$$

Review HW

Sep 20-11:14 AM

$$(2,4); y = \frac{1}{2}x + 3 \perp$$

$$m = -2$$

$$y - 4 = -2(x - 2)$$

$$y - 4 = -2x + 4$$

$$y = -2x + 8$$

Sep 20-12:13 PM

$$(4, -2); y = \frac{3}{4}x + \frac{1}{4}$$

$$m = \frac{3}{4}$$

$$y + 2 = \frac{3}{4}(x - 4)$$

$$y + 2 = \frac{3}{4}x - 3$$

$$y = \frac{3}{4}x - 5$$

Sep 20-12:14 PM

- 1) Find the equation of the line that goes through the point (6,-2) and is perpendicular to $3x - y = 5$.

$$y = 3x - 5$$

$$m = \frac{1}{3}$$

$$y - (-2) = \frac{1}{3}(x - 6)$$

$$y + 2 = \frac{1}{3}x - 2$$

$$y = \frac{1}{3}x - 4$$

- 2) Find the equation of the line that goes through the point (-12, 4) and is parallel to $5x + 6y = 42$.

$$5x + 6y = 42$$

$$y = -\frac{5}{6}x + 7$$

$$m = -\frac{5}{6}$$

$$y - 4 = -\frac{5}{6}(x - (-12))$$

$$y - 4 = -\frac{5}{6}(x + 12)$$

$$y - 4 = -\frac{5}{6}x - 10$$

$$y = -\frac{5}{6}x - 6$$

Sep 19-7:11 AM

- 1) What is the Slope-Intercept Form?

$$y = mx + b$$

- 2) What is the Point-Slope Form?

$$y - y_1 = m(x - x_1)$$

- 3) Find the slope of the line containing the points (-4, 5) and (1, 5). $m = \frac{5-5}{5-(-4)}$

What kind of a line is it?

Horizontal

- 4) Use the slope and the y-intercept to graph the equation.

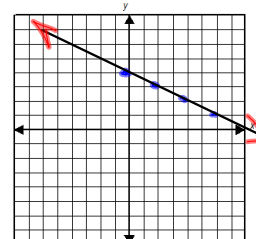
$$3x + 6y = 24$$

$$-3x - 6y = -24$$

$$y = -\frac{1}{2}x + 4$$

$$b = 4$$

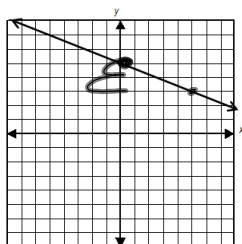
$$m = -\frac{1}{2}$$



Sep 20-12:12 PM

Sep 20-1:23 PM

5) Write an equation in slope-intercept form for the line graphed below.



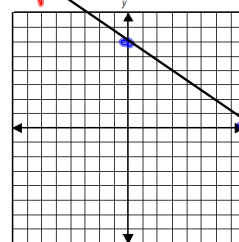
$b = 5$
 $m = -\frac{2}{5}$
 $y = -\frac{2}{5}x + 5$

Sep 20-1:23 PM

6) Use the x and y-intercepts to graph $3x + 6y = 24$.

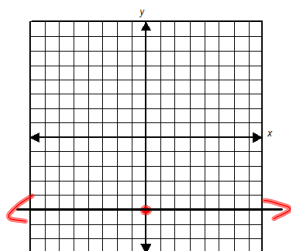
(Make sure you show your work!)

$3x + 6y = 24$
 $x\text{-int}$ $y\text{-int}$
 $\frac{3x}{3} = \frac{24}{3}$ $\frac{6y}{6} = \frac{24}{6}$
 $x = 8$ $y = 4$
 $(8, 0)$ $(0, 4)$



Sep 20-1:23 PM

7) Graph $y = -5$



HW
 Finish the 1.1-1.3 Review
 Quiz on Thursday!

Sep 20-1:29 PM